

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-8. (Cancelled)

9. (Currently Amended) A method for inhibiting synovial cell growth, comprising administering to a patient in need thereof a pharmaceutical composition comprising humanized PM-1 antibody and a physiologically acceptable carrier, wherein said humanized PM-1 antibody comprises:

(A) L chain[[s]] of an antibody to a human IL-6 receptor, each comprising[[:]]

~~(1) a variable (V) region of a light (L) chain of an antibody to the human IL-6 receptor having the following structure:~~

~~FR1⁺-CDR1⁺-FR2⁺-CDR2⁺-FR3⁺-CDR3⁺-FR4⁺~~

~~wherein CDR1¹, CDR2¹ and CDR3¹ which represent a set of three complementarity determining regions comprising a set of the following amino acid sequences:~~

CDR1¹ Arg Ala Ser Gln Asp Ile Ser Ser Tyr Leu Asn (SEQ ID NO: 2)

CDR2¹ Tyr Thr Ser Arg Leu His Ser (SEQ ID NO: 3)

CDR3¹ Gln Gln Gly Asn Thr Leu Pro Tyr Thr (SEQ ID NO: 4);
~~and the FR1⁺, FR2⁺, FR3⁺ and FR4⁺ comprise a set of the following amino acid sequences:~~

FR1⁺ ~~Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys (SEQ ID NO: 5)~~

FR2⁺ ~~Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr (SEQ ID NO: 6)~~

FR3¹ ~~Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp
Ile Ala Thr Tyr Tyr Cys (SEQ ID NO: 7)~~

FR4¹ ~~Phe Gly Gln Gly Thr Lys Val Glu Ile Lys (SEQ ID NO:
8);~~

or

FR1¹ ~~Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
Ser Val Gly Asp Arg Val Thr Ile Thr Cys (SEQ ID NO:
5)~~

FR2¹ ~~Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
Ile Tyr (SEQ ID NO: 6)~~

FR3¹ ~~Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp
Ile Ala Thr Tyr Tyr Cys (SEQ ID NO: 9)~~

FR4¹ ~~Phe Gly Gln Gly Thr Lys Val Glu Ile Lys (SEQ ID NO:
8);~~

and

~~(2) a C region of an L chain of a human antibody C κ ; and~~

(B) H chain[[s]] of an antibody to the human IL-6 receptor, each comprising:

~~(1) a V region of a heavy (H) chain of an antibody to the human IL-6 receptor having the following structure:~~

~~FR1²-CDR1²-FR2²-CDR2²-FR3²-CDR3²-FR4²~~

~~wherein CDR1², CDR2² and CDR3² which represent a set of three complementarity determining regions comprising a set of the following amino acid sequences:~~

CDR1² Ser Asp His Ala Trp Ser (SEQ ID NO: 10)

CDR2² Tyr Ile Ser Tyr Ser Gly Ile Thr Thr Tyr Asn Pro Ser Leu Lys Ser (SEQ ID NO: 11)

CDR3² Ser Leu Ala Arg Thr Thr Ala Met Asp Tyr (SEQ ID NO: 12);

~~and the FR1², FR2², FR3² and FR4² comprise a set of the following amino acid sequences:~~

~~FR1² — Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Arg
Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly
Tyr Ser Ile Thr (SEQ ID NO: 13)~~

~~FR2² — Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile
Gly (SEQ ID NO: 14)~~

~~FR3² — Arg Val Thr Met Leu Arg Asp Thr Ser Lys Asn Gln Phe
Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
Val Tyr Tyr Cys Ala Arg (SEQ ID NO: 15) and~~

~~FR4² — Trp Gly Gln Gly Ser Leu Val Thr Val Ser Ser (SEQ ID
NO: 16);~~

~~and~~

~~(2) a C region of an H chain of a human antibody C γ .~~

10-12. (Cancelled)

13. (Currently Amended) A method of treating chronic rheumatoid arthritis, comprising administering to a patient in need thereof a pharmaceutical composition comprising humanized PM-1 antibody and a physiologically acceptable carrier, wherein said humanized PM-1 antibody comprises:

(A) L chain[[s]] of an antibody to a human IL-6 receptor, each comprising[[:]]

~~(1) a variable (V) region of a light (L) chain of an antibody to the human IL-6 receptor having the following structure:~~

~~FR1⁺-CDR1⁺-FR2⁺-CDR2⁺-FR3⁺-CDR3⁺-FR4⁺~~

~~wherein CDR1¹, CDR2¹ and CDR3¹ which represent a set of three complementarity determining regions comprising a set of the following amino acid sequences:~~

~~CDR1¹ Arg Ala Ser Gln Asp Ile Ser Ser Tyr Leu Asn (SEQ ID
NO: 2)~~

~~CDR2¹ Tyr Thr Ser Arg Leu His Ser (SEQ ID NO: 3)~~

CDR3¹ Gln Gln Gly Asn Thr Leu Pro Tyr Thr (SEQ ID NO: 4);
and the FR1¹, FR2¹, FR3¹ and FR4¹ comprise a set of
the following amino acid sequences:

FR1¹ Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
Ser Val Gly Asp Arg Val Thr Ile Thr Cys (SEQ ID NO:
5)

FR2¹ Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
Ile Tyr (SEQ ID NO: 6)

FR3¹ Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp
Ile Ala Thr Tyr Tyr Cys (SEQ ID NO: 7)

FR4¹ Phe Gly Gln Gly Thr Lys Val Glu Ile Lys (SEQ ID NO:
8);

or

FR1¹ Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
Ser Val Gly Asp Arg Val Thr Ile Thr Cys (SEQ ID NO:
5)

FR2¹ Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
Ile Tyr (SEQ ID NO: 6)

FR3¹ Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp
Ile Ala Thr Tyr Tyr Cys (SEQ ID NO: 9)

FR4¹ Phe Gly Gln Gly Thr Lys Val Glu Ile Lys (SEQ ID NO:
8);

and

(2) a C region of an L chain of a human antibody C κ ; and

(B) H chain[[s]] of an antibody to the human IL-6 receptor, each
comprising:

(1) a V region of a heavy (H) chain of an antibody to the human IL-6
receptor having the following structure:

FR1²-CDR1²-FR2²-CDR2²-FR3²-CDR3²-FR4²

~~wherein~~ CDR1², CDR2² and CDR3² which represent a set of three complementarity determining regions comprising a set of the following amino acid sequences:

CDR1² Ser Asp His Ala Trp Ser (SEQ ID NO: 10)

CDR2² Tyr Ile Ser Tyr Ser Gly Ile Thr Thr Tyr Asn Pro Ser Leu
Lys Ser (SEQ ID NO: 11)

CDR3² Ser Leu Ala Arg Thr Thr Ala Met Asp Tyr (SEQ ID
NO: 12);

~~and the FR1², FR2², FR3² and FR4² comprise a set of the following amino acid sequences:~~

~~FR1² — Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Arg
Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly
Tyr Ser Ile Thr (SEQ ID NO: 13)~~

~~FR2² — Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile
Gly (SEQ ID NO: 14)~~

~~FR3² — Arg Val Thr Met Leu Arg Asp Thr Ser Lys Asn Gln Phe
Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
Val Tyr Tyr Cys Ala Arg (SEQ ID NO: 15) and~~

~~FR4² — Trp Gly Gln Gly Ser Leu Val Thr Val Ser Ser (SEQ ID
NO: 16);~~

~~and~~

~~(2) a C region of an H chain of a human antibody C γ .~~

14. (Previously Presented) The method according to claim 13, wherein the antibody suppresses abnormal growth of synovial cells.

15-25. (Cancelled)